



12BD6

Description and Rating

RADIO-FREQUENCY AMPLIFIER PENTODE

GENERAL DESCRIPTION

Principal Application: The 12BD6 is a miniature remote-cutoff amplifier pentode designed for use as a radio-frequency or intermediate-frequency ampli-

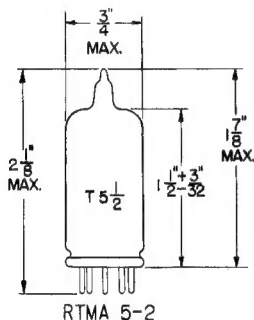
Cathode Coated Unipotential
Heater Voltage (A-C or D-C) 12.6 Volts
Heater Current 0.15 Ampere
Envelope T-5½ Glass
Base E7-1, Miniature Button 7-Pin
Mounting Position Any

fier. Electrically, the 12BD6 is similar to the 12SK7 and, except for heater ratings, is identical to the 6BD6.

Direct Interelectrode Capacitances:

| | With Shield # | Without Shield |
|---------------------------|---------------|------------------------|
| Grid 1 to Plate (Max) . . | 0.005 | 0.004 $\mu\mu\text{f}$ |
| Input | 4.3 | 4.3 $\mu\mu\text{f}$ |
| Output | 5.0 | 5.0 $\mu\mu\text{f}$ |

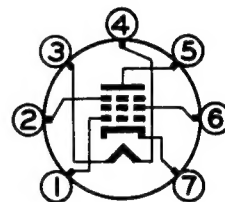
PHYSICAL DIMENSIONS



TERMINAL CONNECTIONS

- Pin 1 - Grid Number 1
- Pin 2 - Grid Number 3 (Suppressor) and Internal Shield
- Pin 3 - Heater
- Pin 4 - Heater
- Pin 5 - Plate
- Pin 6 - Grid Number 2 (Screen)
- Pin 7 - Cathode

BASING DIAGRAM



RTMA 7BK
BOTTOM VIEW

DESIGN CENTER VALUES

| | | |
|----------------------------------|------|-------|
| Plate Voltage | 300 | Volts |
| Screen Voltage | 125 | Volts |
| Plate Dissipation | 3.0 | Watts |
| Screen Dissipation | 0.65 | Watt |
| Heater-Cathode Voltage | 90 | Volts |

MAXIMUM RATINGS

CLASS A₁ AMPLIFIER

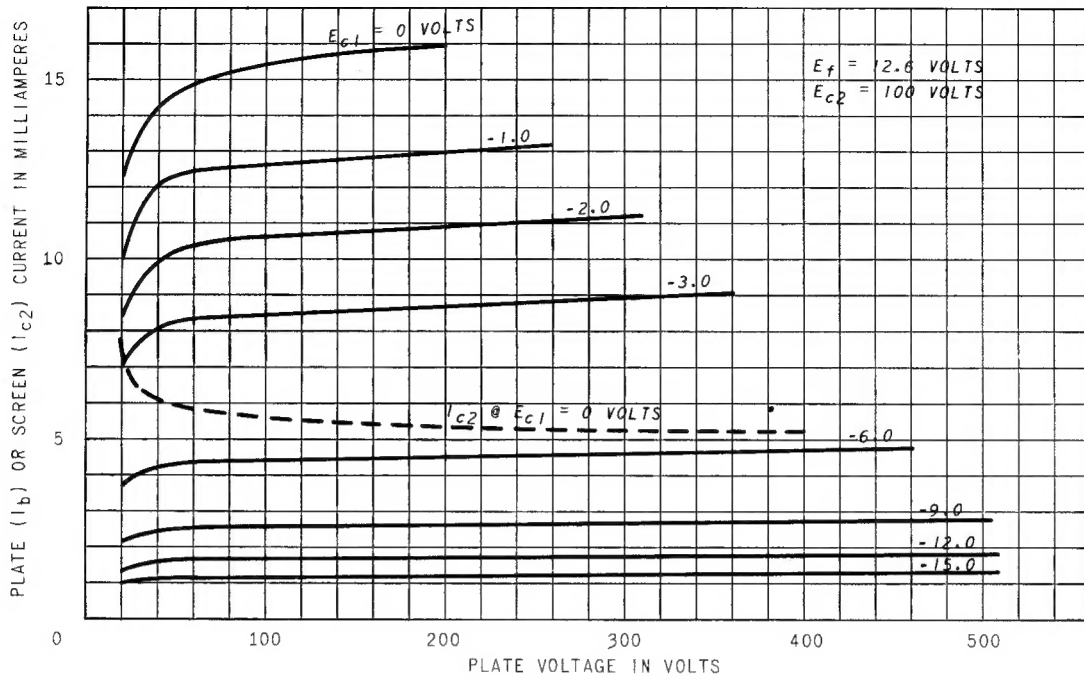
| | | | | |
|--|------|------|------|--------------|
| Plate Voltage | 100 | 125 | 250 | Volts |
| Suppressor Voltage | 0 * | 0 * | 0 * | Volts |
| Screen Voltage | 100 | 125 | 100 | Volts |
| Grid Number 1 Voltage | -1 | -3 | -3 | Volts |
| Plate Resistance | 0.15 | 0.18 | 0.8 | Megohm |
| Transconductance | 2250 | 2350 | 2000 | Micromhos |
| Plate Current | 13 | 13 | 9 | Milliamperes |
| Screen Current | 5 | 5 | 3 | Milliamperes |
| Grid Number 1 Voltage (Approx) for G _m = 10 Micromhos | -35 | -45 | -35 | Volts |

CHARACTERISTICS AND TYPICAL OPERATION

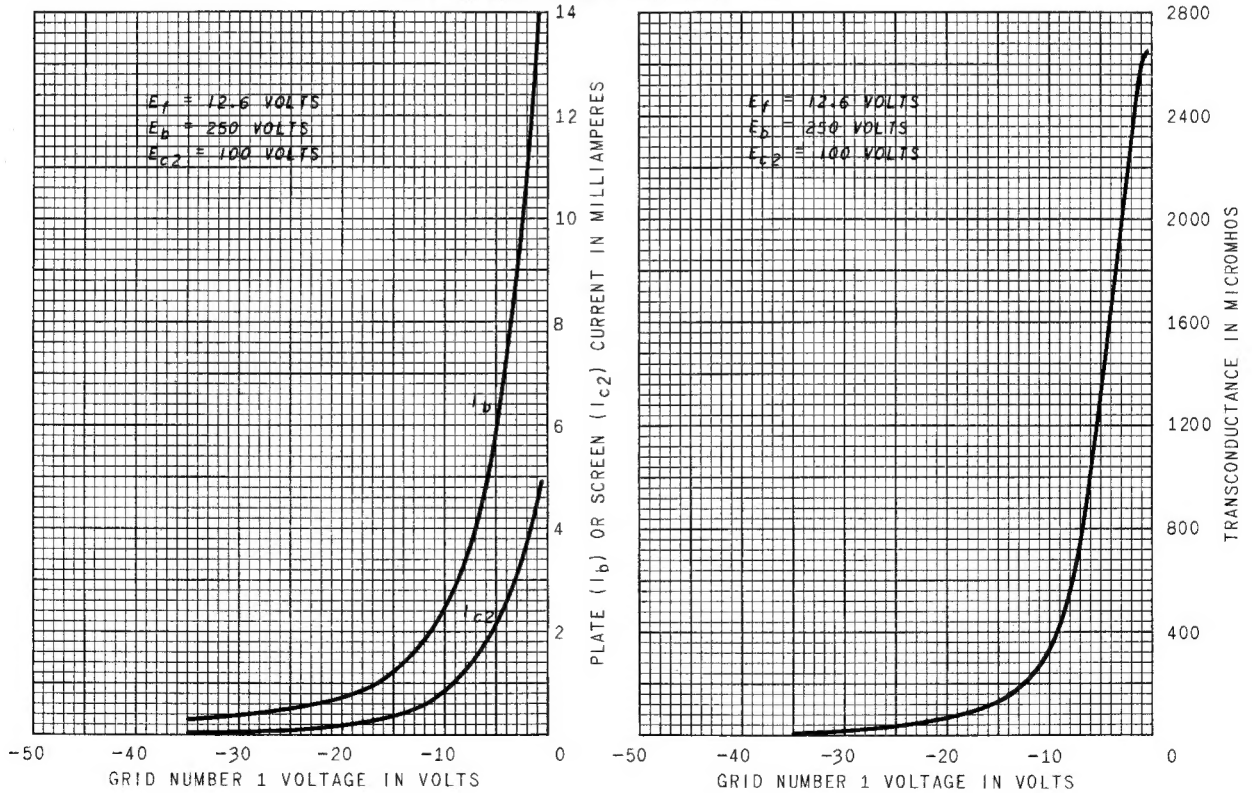
With external shield #316 connected to pin 4

* Pin 2 connected to pin 7 at socket

AVERAGE PLATE CHARACTERISTICS



AVERAGE CHARACTERISTICS



Tube Department, Electronics Division

GENERAL

ELECTRIC

Schenectady, N. Y.